

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions of the claims and listing of the claims in the application:

1. **(Currently Amended)** ~~A~~ An isolated DNA encoding a ~~plant-derived~~ protein whose deletion of function causes an increase in the ~~particle-bearing number~~ glumous flowers, fruits, or seeds of a plant, wherein the DNA is any one of (a) to (d):
 - (a) a DNA encoding a protein comprising the amino acid sequence of SEQ ID NO: 3;
 - (b) a DNA ~~comprising~~ consisting of a coding region ~~comprising~~ of the nucleotide sequence of SEQ ID NO: 1 ~~or~~ 2;
 - (c) ~~a DNA encoding a protein comprising the amino acid sequence of SEQ ID NO: 3, wherein one or more amino acids have been substituted, deleted, added, and/or inserted~~ a DNA comprising a coding region comprising the nucleotide sequence of SEQ ID NO: 2; and
 - (d) ~~a DNA that hybridizes under stringent conditions with a DNA comprising the nucleotide sequence of SEQ ID NO: 1 or 2~~ a DNA encoding a protein which has 95% identity to the amino acid sequence as set forth in SEQ ID NO: 3 and the deletion of function of the protein set forth in SEQ ID NO: 3 results in an increase in the glumous flowers, fruits, or seeds of a plant.
2. **(Currently Amended)** The DNA of claim 1, wherein the DNA is ~~derived~~ isolated from rice.
3. **(Currently Amended)** ~~A~~ An isolated DNA encoding an RNA fully complementary to a transcript of the DNA of claim 1.
4. **(Withdrawn)** A DNA encoding an RNA having ribozyme activity that specifically cleaves a transcript of the DNA of claim 1.
5. **(Withdrawn)** A DNA encoding an RNA that suppresses the expression of the DNA of claim 1 by cosuppression effects at the time of expression in plant cells.

6. **(Currently Amended)** A vector comprising the DNA of any one of claims 1, 2, or 3 ~~to 5~~.
7. **(Currently Amended)** A host cell ~~transfected~~ transformed with the vector of claim 6.
8. **(Currently Amended)** A plant cell ~~transfected~~ transformed with the vector of claim 6.
9. **(Currently Amended)** A ~~transfected~~ transformed plant comprising the plant cell of claim 8.
10. **(Currently Amended)** A ~~transfected~~ transformed plant that is an offspring or a clone of the transformed plant of claim 9.
11. **(Currently Amended)** A transgenic reproductive material of the transformed ~~transfected~~ plant of claim 9.
12. **(Currently Amended)** A method for producing a transformed plant, wherein the method comprises the steps of introducing the DNA of any one of claims 1 ~~to 5~~, 2, or 3 into a plant cell, and regenerating a plant ~~body~~ from said plant cell.
13. **(Withdrawn)** A protein encoded by the DNA of claim 1 or 2.
14. **(Withdrawn)** A method for producing a protein, wherein the method comprises the steps of culturing the host cell of claim 7, and collecting a recombinant protein from said cell or from a culture supernatant thereof.
15. **(Withdrawn)** An antibody that binds to the protein of claim 13.

16. **(Currently Amended)** ~~A~~ An isolated polynucleotide comprising at least 15 continuous nucleotides that are fully complementary to the nucleotide sequence of SEQ ID NO: 1 or 2, or a fully complementary sequence thereof.

17. **(Withdrawn)** A method for increasing the particle-bearing number of a plant, wherein the method comprises the step of expressing the DNA of any one of claims 3 to 5 in the cells of a plant body.

18. **(Currently Amended)** An agent for changing the ~~particle-bearing~~ number of glumous flowers, fruits, or seeds of a plant, wherein the agent comprises the DNA of claim 1 as an active ingredient.

19. **(Withdrawn)** A method for determining the particle-bearing number of a plant, wherein the method comprises the steps of:

- (a) preparing a DNA sample from a test plant body, or a reproductive medium thereof;
- (b) amplifying a region of said DNA sample corresponding to the DNA of claim 1; and
- (c) determining the nucleotide sequence of the amplified DNA region;

wherein the plant is determined to be a variety having a small particle-bearing number when the nucleotide sequence encodes a protein whose deletion of function causes an increase in the particle-bearing number of a plant, and the plant is determined to be a variety having a large particle-bearing number when said protein is not encoded.